

REMARKS

Claims 1-21 remain pending. Claims 1, 11 and 21 have been amended.

All amendments are fully supported by the original disclosure. No new matters have been introduced.

Claims Distinguished

Claims 1-2, 4, 9, 11-12, 14, 19 and 21

Claims 1-2, 4, 9, 11-12, 14, 19 and 21 were rejected under 35 USC 102(e) as being anticipated by U.S. Patent No. 6,438,540 to Nasr ("*Nasr*").

In response, Applicants have amended claims 1-8, 11-19 and 21. In particular, each of independent claims 1, 11 and 21 has been amended to recite in substance the limitations of

- receiving at execution time, a data processing specification having a first and a second unnested data processing cell specification specifying a first and a second data processing cell respectively, with each data processing cell having a plurality of statements including a formula specifying an action or computation, the first data processing cell having a data dependency on the second data processing cell, and specified in a manner to be analyzed before the second data processing cell;
- analyzing in real time, the first and then the second data processing cell specification to determine execution order of said actions/computations specified by said first data processing cell specifications, based at least in part on interaction or computation references between said actions or computations specified; and
- effectuating the data processing specified by the data processing specification in accordance with the determined execution order of said actions/computations specified by said first and second data processing cell specifications. (Underline added)

Thus, in accordance with the plain meaning of the claim language, as understood by those of ordinary skill in the art, the invention claimed is required to be able to process at execution time, a data processing specification with at least two parallel (unnested) data processing cell specifications specifying two data processing cells respectively, where the first cell (to be analyzed first) has a data dependency on the second cell. However, the invention is adapted to be able to recognize and determine in real time, the proper order of execution of the two cells, and

properly effectuate the execution accordingly. Further, note that each cell is required to have a plurality of statements.

To establish a *prima facie* case of anticipation under 35 U.S.C § 102, the Examiner must identify where "each and every facet of the claimed invention is disclosed in the applied reference" *Ex parte Levy*, 17 U.S.P.Q.2d 1461, 1462 (Bd. Pat. App. & Interf. 1990), see also *Electro Med. Sys. S.A. v. Cooper Life Sciences*, 34 F.3d 1048, 1052, 32 U.S.P.Q.2d 1017, 1019 (Fed. Cir. 1994). Further, anticipation requires that each claim element must be identical to a corresponding element in the applied reference. *Glaverbel Société Anonyme v. Northlake Mktg & Supply, Inc.*, 45 F.3d 1550, 1554 (Fed. Cir. 1995).

Applicants submit none of the cited references individually anticipate each and every of the amended limitations, including Nasr.

In rejecting claim 1, the Examiner asserted there has to be an inherent determination of execution order under Nasr. Applicants respectfully disagree.

Consider the portion of the structure illustrated in Fig. 8 of Nasr:

```
<element type = "book">
  <any>
    <element type = "chapter">
      <any>
        <target-element type = "title"/>
      </any>
    </element>
  </any>
</element>
```

In accordance with the plain meaning of the phrase, as understood by those of ordinary skill in the art, "determining an order of execution" of these statements would mean

- determining which of the "examine" instructions should be executed first, the "examine book" instruction, the "examine chapter" instruction, or the "examine title" instruction;
- then after determining one of the three instructions is to be executed first, then determine which of the remaining two instructions are to be executed next, and that implicitly determine which of these three instructions get executed last.

However, as one skill in the art would appreciate, there is no such determination for these XML statements. The execution order of these statements are inherently dictated by the syntax to be

- get a book object
- examine the book element
 - if the book element satisfies the book criteria
 - examine the chapter element
 - if the chapter element satisfies the chapter criteria
 - examine the title
 - if the title satisfies the title criteria
 - select the book object (match)
 - else go to examine chapter (for another chapter)
 - else go to examine chapter (for another chapter)
 - else go to examine book (for another book)

In the course of execution, there is “determination” of which instruction gets fetched and executed next. For example, there is a determination of whether the instruction to examine a chapter element should be fetched and executed for another chapter, or the instruction to examine the title element of the current chapter should be fetched and executed, after examining the chapter element of the current chapter. But such “next instruction fetching determination” is NOT “determining the execution order a set of instructions”, as the plain meaning of the phrase is understood by those of ordinary skill in the art. The “next instruction fetching determination” is determined in accordance with the inherent execution order. The successive determinations of which instructions to be fetched and get executed next is best characterized as *following the inherent execution order, not determining the execution order*.

Even if we are to assume Nasr does “determine the order of execution of the XML statements”, as evident from the discussion above, Nasr nonetheless did not teach the ability of being able to sequentially process at execution time, two unested data processing cell specifications (each having a plurality of statements including a “formula”), recognize in real time the situation where the earlier processed cell has a data dependency on the later processed cell, and order the execution of the second cell before the first cell.

Accordingly, Applicants submit that Claims 1, 11 and 21 are clearly patentable over the cited references, including Nasr.

Claims 2-10 and 12-20 depend from allowable independent claims and are therefore allowable for the reasons already noted above.

Claims 3, 5, 8, 10, 13, 15, 18, 20 and Claims 6-7 and 16-17

Claims 3, 5-8, 10, 13, 15-18 and 20 were rejected under 35 USC 103(a) as being unpatentable over U.S. Patent No. 6,438,540 to Nasr ("*Nasr*") in view of Published U.S. Patent Application No. 2002/0073080 to Lipkin ("*Lipkin*"). Claims 6-7 and 16-17 were rejected under 35 USC 103(a) as being unpatentable over U.S. Patent No. 6,438,540 to Nasr ("*Nasr*") in view of Published U.S. Patent Application No. 2002/0120685 to Srivastava et al. ("*Srivastava*").

Claims 3, 5-8, 10, 13, 15-18, 20, 6-7 and 16-17 are dependent on allowable claims 1 or 11, incorporating its limitations, therefore, for at least the same reasons, claims 3, 5-8, 10, 13, 15-18, 20, 6-7 and 16-17 are patentable over Nasr. Since neither Lipkin nor Srivastava remedy the above discussed deficiencies of Nasr, claims 3, 5-8, 10, 13, 15-18, 20, 6-7 and 16-17 are patentable over Nasr even when combined with either Lipkin, Srivastava, or both.

CONCLUSION

As a result, Applicants submit that all of the pending claims are in condition for allowance. Accordingly, a Notice of Allowance is respectfully requested. If the Examiner has any questions concerning the present paper, the Examiner is kindly requested to contact the undersigned at (206) 689-1216. If any fees are due in connection with filing this paper, the Commissioner is authorized to charge Deposit Account No. 500393.

Respectfully submitted,
SCHWABE, WILLIAMSON & WYATT, PC

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Al AuYeung
Reg. No. 35,432

Customer No. 25943
1211 SW Fifth Ave., Ste. 1600-1900
Portland, Oregon 97204
Phone: (206) 622-1711
FAX: (206) 292-0460

E-Mail: aauyeung@schwabe.com